

REMARKS

Applicants have now had an opportunity to carefully consider the Examiner's comments set forth in the Office Action of November 23, 2010. Claims 1-10, 13-17, and 20-25 are pending in this application.

Reconsideration and reexamination of the Application are requested in view of the comments and amendments herein.

I. The Office Action

Claims 1-4, 7, 9-15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,532,351 to Richards et al. (hereinafter "Richards") in view of U.S. Patent Application Publication No. 2004/0080775 to Owen et al. (hereinafter "Owen") in further view of U.S. Patent No. 5,930,553 to Hirst et al. (hereinafter "Hirst") in further view of U.S. Patent No. 7,146,412 to Turnbull (hereinafter "Turnbull") and in further view of U.S. Patent Application Publication No. 2004/004500 to Hara (hereinafter "Hara").

Claims 5-6, and 8 are rejected under 35 U.S.C. § 103 as being unpatentable over Richards in view of Owen in further view of Hirst and in further view of Turnbull in further view of Hara and in further view of well-known art.

Claims 16-17 and 20-22 are rejected under 35 U.S.C. § 103 as being unpatentable over Richards in view of Owen in further view of U.S. Patent No. 7,262,873 to Rasche et al. (hereinafter "Rasche") in further view of U.S. Patent Application Publication No. 2003/00763305 to McIntyre (hereinafter "McIntyre") in further view of Hirst in further in view of Turnbull and in further view of Hara.

Claims 23-25 are rejected under 35 U.S.C. § 103 as being unpatentable over Richards in view of Owen in further view of Rasche in further view of McIntyre in further view of Hirst in further view of Turnbull in further view of Hara and in further view of well known art.

II. The Presently Claimed Invention

By means of brief review, independent claim 1, and similarly independent claims 9 and 16, is directed to a replaceable module for a printing apparatus with programmable software controls. The replaceable module comprises an internal memory for holding stored instructions, a peripheral memory holding a software upgrade for the printing apparatus programmable software

controls, a communications interface for exchanging information with the printing apparatus, and a microprocessor connected to the internal memory, the peripheral memory and the communications interface. The microprocessor, among other things, performs instructions stored in the internal memory to compare currently installed software and current machine status with available software upgrades to determine if the software upgrade is appropriate, and automatically implements the upgrade or schedules a time in the future to implement the upgrade, if needed.

III. The Present Claims Distinguish Patentably Over the Cited References

Applicant maintains that Richards in view of Owen, Hirst, Turnbull and Hara fails to teach or suggest a replaceable module that includes an internal memory comprising a non-volatile core portion and a volatile portion for holding stored instructions and a peripheral memory external to the module that includes increased storage space for holding a software upgrade for the printing apparatus programmable software controls. According to the Examiner, Richards teaches a replaceable module for a printing apparatus that includes CRUM memory for holding instructions, and, although Richards fails to disclose an internal memory that also comprising a volatile portion for holding data, the Examiner cites Turnbull as teaching a module for a printing apparatus that includes internal memory with a non-volatile core portion (hard disk) and volatile portion (volatile memory) for holding stored instructions. Applicant submits, however, that Turnbull is directed to a computing device, such as a printer, with a controller that may include a data processing unit, a volatile memory (RAM), and a nonvolatile memory. (See col. 6, lines 8-12). As is clearly illustrated in Figure 3, the controller is included within the computing device and there is no teaching or suggestion that such a computing device is in fact a **replaceable module** for a printing apparatus. Accordingly, Applicant submits that the fact that Turnbull teaches that the controller may include both non-volatile and volatile memory is irrelevant, since this teaching would not provide such a memory components in a **replaceable module**. The Examiner submits that it would have been advantageous to modify the replacement module of Richards to include the teachings of Turnbull; however, Applicant submits that combining Richards with Turnbull would not provide the presently claimed replaceable module having both non-volatile and volatile memory, since Turnbull explicitly teaches that the volatile

memory is included within the controller (a non-replaceable component) of the computing device.

Moreover, the Office Action further submits that although Richards fails to teach a module comprising a peripheral memory external to the module, comprising increased storage space for holding a software upgrade for the printing apparatus, Turnbull teaches a module for a printing device that includes EEPROM, which is external to the housing of the controller. However, Applicant submits that, as illustrated in Figure 3 of Turnbull, the EEPROM 332 is contained within the host computer and is specifically described as including the BIOS for the host computer. As is known in the art, BIOS is built into a computer and is charged with loading and starting an operating system. There is absolutely no teaching or suggestion in Turnbull that would indicate this to be a peripheral source of memory including **increased storage space for holding a software upgrade** as is presently claimed.

Furthermore, the Examiner states that “the features upon which applicant relies (i.e., then microprocessor immediately installs or schedules to install the software upgrade, automatically, without any user intervention) are not recited in the rejected claims.” However, Applicant submits that the claims do recite “...the microprocessor performing the stored instructions to compare currently installed software and current machine status with available software upgrades, independent of whether said module has been replaced, to determine if the software upgrade is appropriate for installation and if an upgrade is appropriate, then **automatically** install the software upgrade into the printing apparatus...” (emphasis added). Accordingly, although the claims do not explicitly recite that the upgrade is done without any user intervention, it is implicit in the language that the microprocessor performs this upgrade automatically and therefore necessarily without any user intervention. In contrast, Turnbull teaches that an upgrade applet initiates email notifications that include a selectable option (by clicking a mouse) that may be configured a number of ways, for instance, an option for automatically downloading and installing the upgrade on a computing device without **further** user input if no costs are associated with the upgrade. However, if costs are associated, then the user is required to initiate a browser and navigate to an appropriate location on the server to complete an ecommerce transaction. In either scenario, both options permit the user to control the timing of the automatic download and installation. (See col. 5, lines 53-57). Therefore, the email notification requires some action on the part of the user, either by clicking the selectable option, or by taking action to

pay for an upgrade online. After selecting this option, the upgrade may automatically install, however, this process is not completely automatic as is presently claimed, such that no affirmative selection action needs to occur. Applicant submits that the Examiner's reading of Turnbull is improper, and by designating a preferred time for an upgrade, a user is necessarily required to act on behalf of the upgrade.

The Office Action further maintains that Hara teaches monitoring the progress of an upgrade, reporting any faults, and contacting service personnel if the upgrades are not successfully completed, although Applicants disagrees with the use of Hara's teachings on the grounds that Hara is directed to non-analogous art that is not either in the field of Applicant's endeavor or reasonably pertinent to the particular problem with which Applicant was concerned. The Examiner submits that downloading and installing software packages or upgrades into apparatuses and monitoring the progress is very well known in the art, and therefore, one skilled in the art would have been inclined to look into areas of art such as Hara. However, Applicant maintains that Hara is directed to a **software licensing management system** and method intended to protect the licensees of software packages and prevent the use of illegally copied software. Applicant respectfully submits that although Hara broadly and generally refers to installing software packages and monitoring this process within the disclosure, the purpose of Hara is a software licensing management system, and therefore one skilled in the art would **not be inclined** to even look to the teachings of Hara in the first place, when faced with the particular problem presented in the presently claimed invention, specifically providing a replaceable module capable of automatically locating and implementing programmable software control upgrades. If a person skilled in the art does not pick up a reference, they will necessarily fail to benefit from its teachings.

Additionally, Applicant maintains that the Examiner has failed to provide sufficient support for the combination of Richards, Owen, Hirst, Turnbull, and Hara. The Examiner submits that it would have been totally obvious to one skilled in the art to look for those common features in the cited arts and modify the replacement module system of Richards to include the techniques for operating printing consumables of Owen and Hirst, upgrading techniques of Turnbull, and software updating techniques of Hara for the previously set forth benefits. However, Applicant maintains that reciting the advantages of the presently claimed invention is a blatant example of an improper use of hindsight reasoning to recreate the presently claimed

invention by piecemeal. The listing of various advantages of the proposed combination, without more, does not provide any basis as to why the combination of each reference would have been obvious at the time the presently claimed invention was made. As stated by the Federal Circuit, "it is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious. ... This court has previously stated that '[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780 (Fed. Cir., 1992).

For at least the aforementioned reasons, Applicant submits that the subject claims distinguish patentably over the references of record. As such, Applicant respectfully requests that the rejections of claims 1-10, 13-17, and 20-25 be withdrawn.

CONCLUSION

For the reasons detailed above, it is submitted all remaining claims (Claims 1-10, 13-17, and 20-25) are now in condition for allowance. The foregoing comments do not require unnecessary additional search or examination.

Remaining Claims, as delineated below:

(1) FOR	(2) CLAIMS REMAINING AFTER AMENDMENT LESS HIGHEST NUMBER PREVIOUSLY PAID FOR		(3) NUMBER EXTRA
TOTAL CLAIMS	21	- 25 =	0
INDEPENDENT CLAIMS	3	- 3 =	0

This is an authorization under 37 CFR 1.136(a)(3) to treat any concurrent or future reply, requiring a petition for extension of time, as incorporating a petition for the appropriate extension of time.

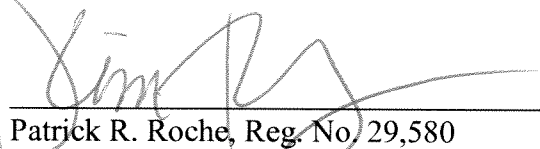
The Commissioner is hereby authorized to charge any filing or prosecution fees which may be required, under 37 CFR 1.16, 1.17, and 1.21 (but not 1.18), or to credit any overpayment, to Deposit Account 24-0037.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to call the undersigned, at Telephone Number (216) 363-9000.

Respectfully submitted,

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Date


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